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ABSTRACT

A study examined the inservice needs of vocational educators related to the inclusion of special needs students in vocational classes. Purposes were to determine the statewide enrollments of special needs students in vocational programs; to examine the instructional needs of vocational educators for working with these students at three schools; to describe the history, program characteristics, and instructional strategies of working with these students; and to compile a list of inservice needs for instructors. The population included 5 administrators, 3 special needs support persons, and 42 instructors. Data were collected from descriptive information about secondary vocational programs in Pennsylvania obtained through publications from the Department of Education; questionnaires sent to the three schools; and interviews with administrators and special needs persons at the schools. Topics identified as being priorities for teachers dealing with special needs students were teacher attitudes, the mainstreaming process, involvement in the Individualized Education Plan, identification of special students, and teachers' rights. Instructors, administrators, and support persons had needs unique to their professional positions and school settings. Recommendations include inservice program development with instructor involvement in the planning. (YLB)

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AN EXAMINATION OF THE PERCEPTIONS OF VOCATIONAL ADMINISTRATORS AND INSTRUCTORS OF THE INSTRUCTIONAL NEEDS OF SPECIAL NEEDS STUDENTS

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Abstract
An Examination of the Perceptions of Vocational Administrators and Instructors of the Instructional Needs of Special Needs Students

This study examined data about the enrollment of handicapped special needs students statewide and at three secondary vocational schools. There were four purposes of this study: to determine the statewide enrollments of special needs students in vocational programs; to examine the instructional needs of vocational educators for working with these students at three schools; to describe the history, program characteristics, and instructional strategies of working with these students; and to compile a list of inservice needs for instructors who work with these students.

The recommendations included that an organized, informative and systematic inservice program should be developed yearly for faculty members at the three schools and that vocational instructors need to be involved in inservice planning and administrators need to take the initiative for involving instructors in the decision-making process and for assessing the instructional needs of vocational instructors.

AN EXAMINATION OF THE PERCEPTIONS OF VOCATIONAL ADMINISTRATORS AND INSTRUCTORS OF THE INSTRUCTIONAL NEEDS OF SPECIAL NEEDS STUDENTS

The 1986-1987 Vocational Education Statistics estimated that 9.5 percent of the secondary students served by vocational education are handicapped. Of these students, 6 percent are enrolled in Intermediate Unit programs, 41 percent in high school programs and 53 percent in area vocational-technical schools (1988, p. 17). Although 9.5 may seem to be a small percentage of students who have special needs, it equals one of every ten students (Vocational Education Statistics, 1988). This seems significant enough to indicate that vocational instructors do have mentally handicapped and learning disabled students in vocational classrooms. Moreover, these instructors should be able to identify these students and determine what specific needs the students might have.

In a report based on a survey of regular classroom teachers, Gardner, Beatty and Avallon (1981) stated that teachers should "recognize the importance of in-service training for regular class teachers who have handicapped learners in their classrooms" (p. 207). Inservice programs are one way of helping teachers, administrators and support personnel to become more competent and comfortable in working with special needs students. One way to provide effective inservice programs is through the assessment of teachers' needs related to the inclusion of special needs students in vocational classes. One way to evaluate the appropriateness of teachers' needs assessment might be to examine the instructional needs of various vocational educators and compare their needs according to

professional title. This study proposed to examine such a comparison in relation to the field of vocational special needs.

Purpose of the Study

There were four specific purposes of this research study. The first was to determine the statewide enrollments and characteristics of special needs students in vocational programs in Pennsylvania. The second was to examine the instructional needs of vocational administrators and vocational instructors for working with special needs students in three specific vocational schools in central Pennsylvania. The third was to describe briefly the history, program characteristics and instructional strategies of working with special needs students at the three schools. The final purpose was to compile a list of priority inservice needs for vocational instructors who work with special needs students.

Introduction

Yin's Case Study Research--Design and Methods (1984) was used as a guide during the preparation of the research questions and research design and the collection and analysis of the data. Yin (1984) suggested that the case study approach can be used for exploratory, descriptive, or explanatory purposes (p. 16). This approach was used for all three purposes.

First, the nature of this study required that a great deal of data be collected and analyzed in order to describe the three secondary vocational schools, their instructional staffs, and the special needs students enrolled in the vocational programs. The descriptive data collected were obtained through the use of a questionnaire and the examination of a Pennsylvania Department of Education publication, Pennsylvania Vocational Education: Enrollment and Completers in Secondary Programs, 1986-1987 (1987). The second purpose of this study was to explore the types of special needs

students in secondary vocational programs, how these programs are adapted to the students' needs, and what instructional needs exist for the instructors working with the special needs students. This information was collected through the use of questionnaires and interviews. The explanatory purpose of this study was to try to draw conclusions about why special needs students enroll in certain vocational programs, why certain programs are or are not successful in training special needs students, how instructors have provided support services for the students and what instructional needs still exist for vocational instructors in secondary programs.

Yin (1984) stated that, "The case study is preferred in examining contemporary events, but when the relevant behaviors cannot be manipulated" (p. 19). Because this study did not have an experimental design nor was there any manipulation of variables involved, the case study approach was considered as a viable and preferred method. In addition, as Yin (1984) pointed out, "the case study's unique strength is its ability to deal with a full variety of evidence..." (p.20). As can be seen in the latter part of this chapter, documents, questionnaires and interviews were used to collect necessary information.

The design of this study involved the formulation of a series of research questions, the selection of the schools to be studied and the identification of the various means of data collection. The next step in this study was to conduct three single-case data collections and analyses using existing documents, interviews and survey questionnaires. Individual case reports were then prepared. The last step was to conduct a cross-case analysis in which conclusions were drawn and a cross-case report was written. Yin's (1984, p. 51) model supported the strategies for looking at a series of questions in terms of the contexts of the available information;

therefore creating , as Sarkees (1988) has noted, a much broader target of inquiry. The rest of this chapter will describe specifically the research study related to the aforementioned purposes.

Research Questions

Nine specific research questions were developed for this study. They were, as follows:

1. How do the total numbers and percentages of special needs students enrolled in secondary Area Vocational-Technical School programs statewide compare to those numbers and percentages of the three specific schools examined in this study?
2. What are the descriptive characteristics, such as age, sex, type of degree, years of experience, number and types of special needs students encountered, based on background information, of the vocational administrators,vocational instructors and special needs support persons at three given vocational schools?
3. What do vocational administrators perceive as being instructional needs for those working with special needs students, in each of the three given secondary vocational schools?
4. What are the instructional needs of vocational instructors and special needs support persons working with special needs students, expressed by the support persons and instructors themselves, in each of the three given vocational schools?
5. What affects the enrollment numbers of special needs students in the various vocational programs at the three given vocational schools?

6. How do the vocational educators at the three given schools describe vocational programs and vocational instructors that effectively educate special needs students?
7. What types of vocational programs appeal to the various exceptionalities of special needs students at the three given schools?
8. What support services are requested and enlisted for use with the special needs students at the three given schools?
9. What inservice topics related to special needs students are seen as being priority needs for vocational instructors, administrators and special needs support persons in the three given schools?

Procedure

Data were collected and analyzed based on three main sources.

1. Descriptive data about secondary vocational programs in the state of Pennsylvania obtained through publications from the Pennsylvania Department of Education.
2. Information about three specific secondary vocational programs obtained from the responses to questionnaires developed to assess the needs of educators who work with special needs students in vocational settings.
3. Narrative descriptive information about educating special needs students in the three specific vocational schools recorded from the responses to interview questions posed to the vocational administrators and special needs support persons at the three specific schools.

The population for this study included 6 administrators, 3 special needs support persons and 57 instructors; the total being 66. These

educators were members of the staffs at three secondary Area Vocational-Technical Schools in central Pennsylvania referred to in this study as School A, School B, and School C. Questionnaires consisting of a background information section and a special needs assessment section were sent to all 66 vocational educators. A total of 50 returns, or a 75.8 percent response rate, included 5 administrators, 3 special needs support persons, and 42 instructors. The responses to the background information section were organized in tabular form according to school and position title. Total numbers and percentages were calculated for each item. The first part of the needs assessment section was arranged in a Likert-type rating scale. Responses to these items were arranged in tabular form according to school and position title. Total numbers and percentages then were calculated for these items. The second part of the needs assessment section requested the respondent to prioritize the top five most important topics for possible future inservice development. Responses to this part were arranged in tabular form, ranging from the most important to the fifth most important, according to school and position title. Comments and suggestions were solicited at the end of the needs assessment section. These responses were reported in narrative fashion.

Discussion and Conclusions

It has been estimated that 15 percent of the 3.6 million children who entered school in 1987 are or will be physically or mentally handicapped in some way (Feichtner and Sarkees, 1987, p. 22). These special needs students one day will be in secondary programs that will have to provide vocational education appropriate for providing skills necessary to secure future employment. The state of Pennsylvania presently has approximately 13.4 percent of its secondary area vocational-technical enrollment

identified as being handicapped in some way (Pennsylvania Vocational Education: Enrollments and Completers in Secondary Programs, 1986-1987). As the number of handicapped students in the educational system increases, so will the numbers enrolling in vocational programs. Inservice programs are one way of improving the skills of vocational educators who work with special needs students. In order to provide inservice programs that are relevant to the needs and concerns of the educators who work with these students, it is important to assess the needs of the educators involved. Needs assessment has been supported by authors, such as Greenan and Parrish (1986, p. 32) and Gear and Gable (1979) who stated that needs assessment is "a process of obtaining discrepancy data, for setting goals, and for establishing priorities among these goals" (p. 37).

This research study attempted to examine data about the enrollment of handicapped special needs students statewide and, specifically, at three secondary area vocational-technical schools. Through a questionnaire designed by this researcher and based on topics found in the current literature (Greenan and Parrish, 1986; Merachnik, 1984; Wircenski and Just, 1984; Thornton and Fan-Subisak, 1979; Grover, 1985; and Gardner, Beatty and Avallon, 1981) and interviews with vocational educators, priority topics for possible inservice programming were identified for those educators working at the three specific schools. The table on page 18 identifies these priority topics according to the professional title of the respondent.

Fifty-three percent of the total enrollment of secondary handicapped students were enrolled in area vocational-technical schools during 1986 and 1987. Of the total secondary enrollment in these programs, 13.4 percent during the period, 1986-1987, were handicapped in some way. School A had

handicapped enrollments of 18.2 percent (1986-1987) and 17.8 percent (1987-1988). School C had enrollments of 13.7 percent (1986-1987) and 14.3 percent (1987-1988). Enrollments of 6.0 percent (1986-1987) and 5.9 percent (1987-1988) were reported at School B. Reasons for the lower percentages at this school include the absence of a food services program which tends to attract special needs students and the presence of students who may be mildly handicapped but have failed to have been identified at the sending schools.

The survey instrument used in this study had two sections; one requested personal background information, the other requested ratings of topics related to vocational programming and special needs students for possible inservice development. Pittman and Stadt (1979) concluded that "demographic and other variables of professions are unrelated to attitudes toward the retarded" (p. 57). For this reason, this researcher did not treat the items on the personal information section as variables related to the responses on the second section of the questionnaire. The responses to the background or personal information section were used solely for describing the populations at the three secondary vocational schools.

A variety of topics identified by researchers as being priorities for teachers dealing with special needs students were discussed in detail in Chapter II of the complete dissertation. A brief examination of these topics in light of the results of this study follows.

A problem area frequently mentioned by researchers was that of the effect of teachers' attitudes towards special needs students (Merachnik, 1984; Hirschoren and Burton, 1979; Pittman and Stadt, 1979). During interviews with vocational directors and special needs support persons, this researcher noted that reasons given for special needs students

enrolling in specific program areas is often affected by the receptive attitudes of the instructors, the willingness of the instructors to modify programs, and a success-oriented learning environment. Interviewees mentioned that concern areas related to vocational programming for special needs students included the lack of understanding by the instructors of the exceptionalities of special needs students, their abilities and needs, and the unwillingness to modify programs for these students. When asked to describe what characteristics or qualities an instructor of special needs students should have, those being interviewed mentioned an understanding of the students and their abilities, patience, flexibility, compassion, cooperation, willingness to modify programs and awareness of students' learning styles. As a result of these interviews, this researcher feels that teacher's attitudes do make a difference when planning vocational programs for special needs students.

Another problem area discussed earlier was the process of mainstreaming and grouping special needs students with regular classroom students (Kingsley, 1979; Hirshoren and Burton, 1979; Greenan, 1984; Cook and Engleman, 1978; Gear and Gable, 1979; Merachnik, 1984). Although the mean rating for item 21, Concept of mainstreaming and alternate grouping methods for students, was 3.4 for administrators and 3.3 for special needs support persons on the special needs assessment questionnaire, the same item had a 2.6 mean value for vocational instructors. This item was not in the list of prioritized topics for any of the three groups of respondents at any of the three schools. However, during the interviews, one administrator explained his concern about the use of the mainstreaming process for all special needs students. The importance of this topic for instructors,

according to the results of this study, was not as high as previous researchers previously had found.

The involvement of vocational educators in the Individualized Education Plan process was mentioned as a priority topic by several authors (Greenan and Parrish, 1986; Merachnik, 1984; Thornton and Fan-Subisak, 1979). Two items on the needs assessment section of the questionnaire were related to the Individualized Education Plan process: item 1, Development of the Individualized Education Plan, and item 2, Interpretation of the Individualized Education Plan. Once again, the mean ratings of these two items were higher for administrators (3.4, item 1, and 3.8, item 2) and special needs support persons (3.3, item 1, and 3.7, item 2) than for instructors (2.9 for both items). In fact, item 2 had the highest mean rating, 3.8, of all topics for vocational administrators. This same item, however, was on the top five prioritized topics list for administrators at only one school, School B. Item 1 was on the top five prioritized lists at School C for both administrators and instructors. Two individuals at this same school expressed concern that vocational components of the Individualized Education Plans were not provided for the students. The concern about Individualized Education Plans in this study was expressed more by administrators than by other vocational educators.

Jensen and Schaefer (1978) and Merachnik (1984) identified the concerns of teachers about safety practices for special needs students. Item 25, Special safety practices and procedures for special needs students, had a mean rating of 3.4 for administrators, 3.5 for instructors, and 3.3 for special needs support persons. This item had the third highest mean rating by vocational instructors and was in the top mean ranking lists for all three schools. However, when asked to identify priorities for possible inservice

development, only the vocational administrators at School C identified this item as a priority topic. Therefore, although vocational educators agree that safety practices is a concern, very few identified this concern as a priority for inservice development.

Another topic of interest to vocational educators was that of the identification of special students (Walker, 1983; Wircenski and Just, 1984). The identification of special needs students, item 4, had a mean rating of 3.6 for administrators and instructors and 3.3 for special needs support persons. This item was in the top mean ranking lists for both administrators and instructors and was tied with another item for the top mean ranking of the total of all vocational educators. The importance of this item in this survey supports the aforementioned authors' suggestions that this topic is of concern to vocational educators.

The concern about assessment and evaluation (Greenan, 1984; Gardner, Beatty and Avallon, 1981; Merachnik, 1984) was expressed on the needs assessment questionnaire in item 19, Alternate assessment and evaluation methods for students. This item was rated 3.0 by administrators and instructors and 3.3 by support persons. In spite of these ratings, only vocational administrators at School A felt that this item should be a priority for possible inservice development.

The accessibility of classrooms and barrier-free environments were topics found in the review of literature that concerned vocational educators (Greenan, 1984; Greenan and Parrish,1986; Thornton and Fan-Subisak, 1979). Adapting to environmental barriers, item 8 on the questionnaire, had a mean rating of 3.0 for administrators, 2.9 for instructors and 4.0 for support persons. Although in the list of the top mean ranking for inservice topics

for support persons, this item was not identified by any professional group as a prioritized topic for future inservice development.

Teachers' and students' rights were mentioned by Gardner, Beatty and Avallon (1981) as concerns for vocational educators. Two items related to these concerns were on the needs assessment section of the questionnaire. Item 14, Teacher rights and liabilities, received mean ratings of 3.2 for administrators, 3.4 for instructors, and 3.7 for special needs support persons. This item was in the list of top mean ranking for instructors and in the list for the total of all the respondents. Item 15, Student rights, received mean ratings of 3.0 for administrators, 2.9 for instructors, and 4.0 for special needs support persons. Student rights was in the list of top mean ranking for the support persons. However, administrators and instructors expressed more concern about teachers' rights than students' rights. Teacher rights was identified as a topic for inservice development by instructors at School A. Student rights was identified by administrators and support persons at School B.

Jensen and Schaefer (1978) stated that, "Teachers seem to be better predictors of what other teachers will like and regard as effective than administrators" (p. 35). When examining the lists of top mean ranking for inservice topics for vocational instructors, it can be noted that five topics were in the lists for all three schools. A sixth topic was common to the lists of two of the three schools. Moreover, the lists of the top five prioritized topics for possible inservice development for instructors reveal that two topics were common to the lists of all three schools. In addition one topic was common to the lists of two of the schools with a closely related topic on the list for the third school. This researcher concluded that vocational instructors from three different secondary vocational schools

have specific instructional needs in common. Although there are instructional needs for instructors that are unique to specific schools, the instructors were able to identify similar concerns for possible inservice development.

Vocational administrators, as a group, had two topics with top mean rankings in common with those for vocational instructors, as a group. Special needs support persons had one topic in common with the list of topics for instructors. There were no topics common to the lists of administrators and support persons. When examining the lists of the top five prioritized topics for inservice development, it can be seen that only one topic was common to the lists of administrators at at least two of the three schools. Two topics were common to the lists of instructors at all three schools. A third topic was common to the lists of two schools with a related topic on the list of the third school. Five topics were common to the lists of special needs support persons at two of the three schools. However, there were no topics common to the lists of all three schools. Once again, vocational instructors at all three schools identified several topics for possible inservice development that were priorities for their fellow peers. Therefore, it was concluded that instructors , administrators and special needs support persons have needs unique to their respective professional positions and school settings. Inservice needs for instructors may be different than those identified by the administrators at the same school. The instructors, then, should be encouraged to express their needs for inservice development. This supports the statement by Iwanicki and McEachern (1984) that inservice must focus on "areas where teachers perceive the need for improvement" (p. 38) and the statement by Zirkel and Albert (1979) that inservice based on needs assessment must be "based on

the needs of teachers, particularly the needs of teachers as perceived by teachers" (p. 328).

Recommendations

Despite the legislation regarding vocational programming for special needs students, the money allocated for such programs, the support personnel and services provided at vocational schools and the passage of time since the introduction of specific vocational special needs programs, there is a disturbing indication raised in this study that vocational education for special needs students is not as effective as it could be or should be in a small, limited sample of secondary Area Vocational-Technical Schools in central Pennsylvania. The results of the in-depth examinations conducted for this study encouraged the development of a series of recommendations listed below.

1. A great deal of frustration about vocational programming for special needs students was expressed by vocational educators in the comments made on the questionnaires and in the responses to questions stated during the interview sessions. Specifically, special needs support persons stated that instructors are often unaware of the abilities of the special needs students, of the support services available at the schools, of the provisions for additional support services, and of the legislative efforts to provide vocational training for all special needs students. Feelings of frustration similarly were expressed by comments from instructors who were concerned with the types of students placed in vocational classes, the abilities of these students, the need to modify and adapt materials and curriculum and the methods of evaluating student progress. Vocational administrators stated that

few inservice programs are provided for their staff. Specifically, inservice programs related to vocational programming for special needs students have not been offered to faculty members. This researcher strongly suggests that an inservice program or faculty meeting be set aside each fall in order to explain to faculty members the types of special needs students enrolled in the various programs, the support services available from the special needs support person, the additional support services available, the responsibility to provide vocational training for these students and to address any additional concerns that individuals might have. The special needs support persons would be ideal resources for providing their expertise about the special needs students and the available support services. An organized, informative and systematic inservice approach to vocational programming for special needs students may alleviate some of the expressed frustrations in the schools.

2. Administrators tend to be responsible for developing inservice programs for their staff members. However, vocational instructors in this study expressed different concerns about vocational programming for special needs students than did the vocational administrators. Moreover, the concerns of the vocational instructors were similar regardless of the vocational school where they were employed. As vocational instructors seem to be good predictors of their needs, this researcher recommends that vocational administrators conduct periodic needs assessments of the instructors and accordingly plan inservice programs that meet the specific needs of the instructors who are working closely with

the students. In addition, it is recommended that administrators involve their instructors in the decision-making and planning process for inservice development in order to assure relevancy to the instructors' needs.

3. The statewide percentage of handicapped students enrolled in secondary Area Vocational-Technical Schools during 1986-1987 was 13.4 percent. Two of the three schools included in this research study had enrollments larger than the statewide percentage. The third school's percentage of handicapped enrollment was less than half of the statewide percentage. A large difference such as this is a suspicious figure. The special needs support person indicated that the absence of a food service program which tends to attract special needs students and the presence of students who may be mildly handicapped but have failed to have been identified at the sending schools may be two reasons for this discrepancy between the school's enrollment and the statewide enrollment. The addition of a food service program which may increase the enrollment of handicapped students is currently under consideration. When considering the situation of unidentified students, it is difficult for this researcher to understand how high school age students could have progressed through the school system with learning difficulties that have not been identified by any school employee. This is an injustice to the student who is about to graduate from high school and who has not developed a minimal level of basic academic skills, as well as obtained any employability skills. In light of this situation, it is recommended that sending school districts review and improve the process of

identifying special needs students. Moreover, if a student who enters the vocational school is thought to be handicapped or learning disabled, the student's sending school should perform immediately the necessary testing in order to specifically identify the student's learning difficulties. In addition, relevant background information about the special needs students needs to be communicated to the vocational schools in a timely fashion.

4. Vocational instructors were asked to prioritize topics related to vocational programming for special needs students. Previous research indicated that teachers tend to predict the needs of other teachers better than administrators do. The results of this study support the previous research in that there were similar items common to the prioritized lists of the groups at the three schools. Based upon this information, it is recommended that inservice programs related to the following topics be developed: availability of support services; adapting and/or developing alternate instructional materials; and methods of obtaining background information about students.

5. Special needs support persons prioritized topics for inservice development related to their needs working directly with the special needs students. Topics common to their lists that should be considered for inservice were: the adaptation and development of curriculum and instructional materials for special needs students, the knowledge of exceptionalities of special needs students, and the employment practices and available job placements for special needs students.

Table Top Mean Ranking for Inservice Topics, Total by Professional Title

Administrators		Instructors		Support Persons	
Topic	Mean	Topic	Mean	Topic	Mean
Interpretation of the Individualized Education Plan.	3.8	Obtaining background information about student; including health record, reading and math skills levels, diagnostic test results and parental information.	3.7	Knowledge of exceptionalities of special needs students.	4.0
Identification of special needs students.	3.6	Identification of special needs students.	3.6	Adapting to environmental barriers.	4.0
Support services.	3.6	Special safety practices and procedures for special needs students.	3.5	Development of alternate instructional materials.	4.0
Educational needs of students.	3.6	Teacher rights and liabilities.	3.4	Student rights.	4.0
Location and availability of professional development courses and inservice programs concerning the teaching of special needs students.	3.6	Support services.	3.4	Adapting curriculum to students.	4.0
		Knowledge of exceptionalities of special needs students.	3.4	Adapting instructional materials to students.	4.0

References

Cook, I. D., and Engleman, V. (1978). Vocational education for the handicapped: Methodology for planning and implementing inservice. Education and Training of the Mentally Retarded, 13(1), 294-297.

Feichtner, S., and Sarkees, M. (1987). Working together: The special needs team. Vocational Education Journal, 62(2), 22-24.

Gardner, D. C., Beatty, G. J., and Avallon, J. L. (1981). National survey of the training needs of secondary regular class teachers for working with handicapped students. College Student Journal, 15(3), 198-208.

Gear, G. H., and Gable, R. K. (1979). Educating handicapped children in the regular classroom: Needs assessment in teacher preparation. Journal of Research and Development in Education, 12(4), 36-45.

Greenan, J. P. (1984). Networking needs in vocational special education. Champaign, IL: National Network for Professional Development in Vocational Special Education. (ERIC Document Reproduction Service No. ED 260 538).

Greenan, J. P., and Parrish, L. H. (1986). Implications for teacher education. The Journal for Vocational Special Needs Education, 8(3), 29-32.

Grover, H. J. (1985). Designated vocational instruction: A cooperative process for change. (Bulletin No. 6007). Madison, WI: Wisconsin Department of Public Instruction. (ERIC Document Reproduction Service No. ED 262 552).

Hirshoren, A., and Burton, T. (1979). Willingness of regular teachers to participate in mainstreaming handicapped children. Journal of Research and Development in Education, 12(4), 93-99.

Iwanicki, E. F., and McEachern, L. (1984). Using teacher self-assessment to identify staff development needs. Journal of Teacher Education, 35(2), 38-41.

Jensen, R. N., and Schaefer, C. J. (1978). Making inservice for special needs work for vo-ed teachers. School Shop, 38(1), 35-36.

Kingsley, L. D. (1979). How to stay on target with special populations. VocEd, 54(8), 58-60.

Merachnik, D. (1984). Understanding the needs of vocational educators. The Journal for Vocational Special Needs Education, 6(2), 3-7.

Pennsylvania vocational education: Enrollments and completers in secondary programs, 1986-1987. (1987). Harrisburg, PA: Vocational Education Management Information System.

Pittman, R. L., and Stadt, R. W. (1979). Attitudes of vocational teachers, counselors, and administrators towards mentally retarded students in area vocational schools. Journal of Industrial Teacher Education, 16(3), 50-59.

Sarkees, M. (1988, February). Research symposium notes. Notes based on a presentation by Dr. Alan Peshkin. Champaign, IL.

Thornton, L. J., and Fan-Subisak, J. (1979). Assessing and meeting the in-service staff development needs of vocational educators serving special needs learners (Project No. 94-9003). Harrisburg, PA: Pennsylvania Department of Education--Bureau of Vocational Education.

Vocational education statistics, 1986-1987. (1988). Harrisburg, PA: Pennsylvania Department of Education.

Walker, S. (1983). A comparison of personnel training needs and program priorities for the disabled in Ghana and Nigeria. Journal of Negro Education, 52(2), 162-169.

Wircenski, J. L., and Just, D. (1984). An inservice staff development program for vocational teachers working with disadvantaged students. Journal of Industrial Teacher Education, 22(1), 41-50.

Yin, R. K. (1984). Case study research: Design and methods. Beverly Hills, CA: Sage Publications.

Zirkel, P. A., and Albert, V. F. (1979). Assessing teachers' preferences regarding in-service education. The Clearing House, 52(7), 328-332.